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# VENLAFAXINE (Effexor, Effexor XR) Fact Sheet [G]

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## **BOTTOM LINE:**

Fewer data than SSRIs places venlafaxine in the second-line category for both depression and GAD in kids.

## **PEDIATRIC FDA INDICATIONS:**

None.

## **ADULT FDA INDICATIONS:**

Major depression; social anxiety disorder; GAD; panic disorder.

## **OFF-LABEL USES:**

PTSD; PMDD; vasomotor symptoms of menopause; diabetic peripheral neuropathy; fibromyalgia.

## **DOSAGE FORMS:**

- **Tablets (G):** 25 mg, 37.5 mg, 50 mg, 75 mg, 100 mg (scored).
- **ER tablets (G):** 37.5 mg, 75 mg, 150 mg, 225 mg.

## **PEDIATRIC DOSAGE GUIDANCE:**

- Depression:
  - Ages 8–12: Start 12.5 mg QD or 37.5 mg as XR once daily; ↑ dose by 12.5 mg/day (IR) or 37.5 mg/day (XR) increments at intervals of four or more days; max 75 mg/day (divided TID for IR). IR may be switched to nearest equivalent daily dose of XR QD.
  - Ages 13–17: Start 25 mg QD or 37.5 mg as XR QD, ↑ dose by 25 mg/day (IR) or 37.5 mg/day (XR) increments at intervals of four or more days; max 75 mg/day (divided TID for IR). ER max dose 225 mg/day in adolescents.
- Anxiety:
  - XR: Start 37.5 mg QD, ↑ by 37.5 mg/day at weekly intervals; max 225 mg/day.

**MONITORING:** Periodic BP.

**COST:** \$

## **SIDE EFFECTS:**

- Most common: Anorexia, constipation, dizziness, dry mouth, nausea, nervousness, somnolence, sweating, sexual side effects, headache, insomnia.
- Serious but rare: Sustained, dose-related hypertension reported. May cause hyponatremia or SIADH; use with caution in patients who are volume-depleted, elderly, or taking diuretics.

## **MECHANISM, PHARMACOKINETICS, AND DRUG INTERACTIONS:**

- Serotonin and norepinephrine reuptake inhibitor.
- Metabolized primarily through CYP2D6 to O-desmethylvenlafaxine (ODV), major active metabolite (an SNRI, marketed as Pristiq), and also by CYP3A4; inhibitor of CYP2D6;  $t_{1/2}$ : 5 hours (11 hours for ODV).
- Avoid use with MAOIs and other serotonergic agents. Caution with CYP2D6 or 3A4 inhibitors, which may increase venlafaxine levels.

## **EVIDENCE AND CLINICAL PEARLS**

- An open study suggested venlafaxine may be effective for adolescent depression, but two randomized controlled studies in kids (7–17 years) with depression found venlafaxine was no better than placebo.
- Two randomized double-blind placebo-controlled studies in more than 300 children and adolescents with GAD showed greater improvement with venlafaxine compared to placebo. Efficacy has been shown in social phobia as well.
- For patients with nausea, start at lower dose, titrate more slowly, and give with food.
- May cause false positive for PCP in a urine drug screen.
- Increase in blood pressure much more likely in doses >225 mg/day.
- Significant discontinuation syndrome, even with XR formulation. Taper by no more than 75 mg/week to discontinue.

## **FUN FACT:**

Venlafaxine is structurally related to the atypical opioid analgesic tramadol (Ultram), itself a serotonergic agent, but not to any other antidepressant drugs.